

Rojjana Udomsai 2012 : Path-coefficient and Stability in Kamphaeng Saen Sugarcane Varieties.
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Study of components of yield, CCS and sugar yield in varietal trails having different cane yield by path coefficient analysis and study of varietal stability by GGE analysis were conducted in 8 varietal trails having 10 Kamphaeng Saen sugarcane varieties of Cane and Sugar Research and Development Center and 2 checked varieties. Different direct and indirect effect were observed in cane yield and CCS to sugar yield, in yield components to cane yield and in CCS components to CCS in varietal trails having different cane yield. About the same level of direct effect of cane yield and CCS to sugar yield were observed in varietal trails having high and moderate cane yield, but cane yield had higher direct effect than CCS in varietal trails having low cane yield. Cane number per rai and weight per stem had high direct effect to cane yield, in which high direct effect through the other characters were observed in varietal trails having high and moderate cane yield but low indirect effect were observed in varietal trails having low cane yield. In CCS components, the high direct of pol to CCS and high indirect effect of brix and purity through pol to CCS were observed in varietal trails having high and low cane yield, the high direct effect of brix and purity and the indirect effect through the other characters to CCS were observed in varietal trails having moderate cane yield. In the study of GGE analysis, Kamphaeng Saen 00-57 and LK 92-11 were the high stability varieties in cane yield , CCS and sugar yield, Kamphaeng Saen 03-3-5 was the high stability varieties in CCS and sugar yield and K 88-92 was the high stability varieties in cane yield and sugar yield. Nong Saeng trail was observed to have the outstanding varieties different from the other trails in cane yield, CCS and sugar yield, while Ban Bueng trail, Bueng Samakkhi trail and Nong Rue trail and also Dan Makham Tia and Khong Klung trail had the almost the same outstanding varieties. Trails having high difference in cane yield of varieties were Ban Bueng trail, Cha am trail and Nong Saeng trail, while those having high difference in CCS of varieties were Nong Rue trail, Bueng Samakkhi trail, Ban Bueng trail and Nong Saeng trail. Trails having less difference in cane yield of varieties were Sri Thep trail and Nong Rue trail, while those having less difference in CCS of varieties were Nong Saeng trail and those having less difference in sugar yield were Sri Thep trail and Nong Rue trail.

Student's signature

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